

one cannot simply give an account of reasoning. But this does not imply that in justifying one is doing "something other than reasoning" (p. 118), which would imply the decidedly odd conclusion that in justifying one is not reasoning. In justifying one is reasoning in a special way, under special conditions, and for a special purpose. Wellman apparently sensed something of this, but the paradoxical way he chose to express the insight that the practice of justification cannot simply be identified with reasoning is simply unjustifiable. It would be as accurate to say that in arguing one is not reasoning as to say that in justifying one is not reasoning. It may be that "there are justifying responses which are not reasons" (p. 117), but it does not follow that in giving them one is not reasoning.

There is much more that is worthy of discussion, and there is much that is very very good. It would be a shame if this book, issued without fanfare and apparently the recipient of little notice, were to disappear from sight in the glare created by other works brought out about the same time by more glamorous or famous thinkers. It would also be a shame if the critical points I have made were to lead the reader to think that the book is not worthy of attention. The author has thought long and hard about issues of great consequence, and has original and intriguing things to say. In a passage especially appropriate, he expresses the hope that his proposal will prove to "have that tantalizing combination of plausibility and implausibility that provokes critical discussion and further exploration" (p. 168). This combination it has, in abundance.

MARCUS SINGER

University of Wisconsin

THE UNDERLYING REALITY OF LANGUAGE AND ITS PHILOSOPHICAL IMPORT. By JERROLD J. KATZ. New York, Harper and Row, 1971. Pp. viii, 189. \$6.00 (cloth); \$2.45 (paper).

In content and format this book resembles Katz's earlier *The Philosophy of Language* (New York, 1966). Readers seeking elaboration and revision of the views in *The Philosophy of Language* would better be directed to Katz's more recent *Semantic Theory* (New York, 1972). The volume under review has a different goal. "Specialists," Katz notes, "sometimes flatter themselves that they could work out just the right way of presenting their specialization so that it would be acces-

sible to the 'general reader' " (p. vii). This is Katz's attempt at providing such a presentation for general readers at the university level who have a bit of background in philosophy and none in linguistics. The specialization at hand is the philosophy of language which, on Katz's avowedly partisan view, is continuous with the theory of transformational grammar.

The book both begins (Chapter 2) and ends (Chapter 7) with a pair of critiques of Wittgenstein—the early Wittgenstein taken as an exemplar of positivist language reformers, the later Wittgenstein as the progenitor of ordinary language analysts. Both are faulted for failure to attempt systematic theorizing about natural language. In the positivists the failure is traced to a distaste for the complexities of the vernacular; in the ordinary language analysts it is traced to a distaste for theory. Details of the critique follow generally the line developed by Katz and Fodor a decade earlier ("What's Wrong with the Philosophy of Language?," *Inquiry*, 5 [1962]). The current exposition is clear and cogent.

Three long chapters comprise the core of the volume, the first devoted to syntax, the second to semantics, the third to philosophical implications. Running through all three is a didactic conceit, a contrast between "Democritean" and "non-Democritean" theories or views of reality. Non-Democritean theories take things to be as they appear to be. They postulate no entities or properties beyond those that can be observed. Democritean theories maintain that appearances are deceptive. They postulate an underlying reality of unobservable entities and processes with the hope of providing a deeper and more powerful explanation of superficial appearances. Democritean theories are the good guys. Included in their ranks are transformational grammar, Katzian semantics, and the atomic theory of matter.

The conceit is an unfortunate one. Few of the disputes Katz considers are comfortably characterized as Democritean versus non-Democritean. And urging rejected theories into the non-Democritean camp does nothing to clarify the exposition. The troubles are most pronounced in the chapter on syntax.

In his discussion of syntax Katz portrays non-Democriteans as claiming "that the prediction and explanation of . . . grammatical distinctions among sentence types can be carried out without referring to anything but observationally manifest features of the utterance tokens of these types" (p. 19). A few lines earlier we learned that "observationally manifest" features are those that "have a physical basis in the sound pattern of the utterance." And a few pages later we

learn that “the intuitive judgements of fluent speakers constitute the empirical phenomenon to be predicted by [a grammar]” (p. 23). Putting these together we find the non-Democritean claiming that intuitive judgments about grammaticality, ambiguity, synonymy, and such are predictable on the basis of the sort of information that could be gathered from a tape recording (or perhaps a sound film) of a native speaker speaking Native. This unlikely doctrine, Katz maintains, is “the dominant conception of a grammar in modern structural linguistics” (p. 31). Its Democritean challenger is “the transformational model of grammar” (p. 46).

Actually, there are many issues that divide transformationalists from the heterogeneous group Katz labels “structuralists.” One cluster of issues focuses on the role of intuitions in grammar. Is the use of intuitions as data methodologically acceptable? Should a grammar be expected to predict intuitions? Transformationalists answer yes; some structuralists disagree. There is much to be said against the methodological prissiness of those who would restrict a grammarian’s data to a tape-recordable corpus. But surely those who abjure intuitions as data would also deny interest in building a theory that predicts them. Nor does the transformationalist’s interest in predicting intuitions make him more of a Democritean than the structuralist.

Another issue on which transformationalists and their opponents divide is the adequacy of phrase structure grammars. The dispute is intelligible only if the phrase structure advocate shares the transformationalist’s attitude toward intuitions. For the debate is over the possibility of constructing phrase structure grammars that are (at least) descriptively adequate—that is, that correctly specify grammatical intuitions. Katz’s account of the dispute is marred by his attempt to depict the phrase structure theorist as a non-Democritean. Phrase structure theorists, we are told, restrict their attention to surface structure while transformationalists postulate an underlying reality to explain syntactic facts. “We use the terms ‘deep structure’ and ‘surface structure’ to refer, respectively, to this hypothesized, underlying syntactic reality and to the observable syntactic organization that sentences manifest in the form of utterances” (p. 47). But recall that observationally manifest features are those that “have a physical basis in the sound pattern of the utterance.” We seem led to the intoxicating conclusion that the surface structure of a sentence is somehow to be extracted from a tape recording of its utterance. On a more sober view, phrase structure and transformational grammars both hypothesize unobserved structures. Their disagreement is over the nature and

complexity of the structure hypothesized. Phrase structure theorists and transformationalists are both Democriteans.

Katz's chapter, "On the Philosophical Import of Underlying Linguistic Reality," selects three philosophical problems to illustrate the thesis that "steps can be taken toward the solution of philosophic problems when a theory of language hypothesizing an underlying level of linguistic structure is brought to bear on them" (p. 123). Each of the problems discussed is said to be a facet of the rationalist-empiricist controversy. Two of the three, the analyticity debate and the matter of innate ideas, were previously discussed in *The Philosophy of Language*. The third, "the problem of percept determination," is posed as follows: "How are knowledge, beliefs, expectations, etc. used to interpret sensory signals; what is the nature of the relation between a sensory signal and the resulting percept?" (p. 124). A "percept," as Katz uses the term, is a "mental representation" which, in veridical perception, is caused (in part) by the action of the environment on the sense organs. In cases of illusion or hallucination an indistinguishable percept may result from quite different causes. The empiricist, according to Katz, advances a copy theory that takes the mechanism which ordinarily produces percepts to be "some sort of duplicating device or natural Xerox machine" (p. 126). The rationalist, by contrast, takes the mechanism to be more complex, capable of "internally generating percepts by a process in which much of their general organization and content is contributed by the perceiver himself" (p. 126). In the case of speech perception the rationalist's victory is assured when Katz stipulates that the output of the percept-forming mechanism "can be characterized in terms of the information contained in the linguistic description of the utterance that is provided by an optimal grammar of the language" (p. 127). If the sentence uttered is "The cat is on the mat," the percept, as Katz would have it, contains the information that the sentence is grammatical, that "the cat" is the subject, that "the mat" is a noun phrase, and so forth. And, as Katz rightly notes, the copy theory is hard pressed to account for the semantic and syntactic information that would be contained in such a percept merely on the basis of the physical features of the acoustic signal (pp. 128-129). Yet it is hard to imagine that this argument would silence any but a straw empiricist. On Katz's sketch of the copy theory, the fact that a person knows a language should be quite irrelevant to the percept he forms on hearing a sentence of the language; on hearing an English sentence a monolingual Hungarian should form the same percept as you or I. But surely any empiricist who accepts this as a consequence

of his view will reject Katz's characterization of the percept formed during speech perception. The empiricist need not deny that, on hearing a sentence in a language he knows, a speaker comes to (tacitly) know all the information contained in the proper linguistic description of the utterance.¹ He need only claim that this is *inferred* knowledge, with the inference based in part on the informationally poor percept copied from the auditory signal. Of course the inference is "tacit." But no matter, so is the knowledge.

Katz's treatment of analyticity is of a piece with the account first offered by Katz and Fodor in "The Structure of a Semantic Theory" (*Language*, 39 [1963]). The basic idea is to use various semantic intuitions as data for a semantic theory; analyticity is then defined via the notions of the theory. Katz successfully fends off the charge of circularity. But he is less successful in explaining why the class of sentences selected by the "theoretical definition" is *analytic* in any but a Pickwickian sense. For surely no theory will give an account of analyticity properly so called, unless it provides some reason to believe that the sentences it dubs "analytic" cannot be false. Yet the route from data about intuitions to inferences about truth values has never been clearly explained.

STEPHEN P. STICH

The University of Michigan

A CRITIQUE OF MAX WEBER'S PHILOSOPHY OF SOCIAL SCIENCE. By W. G. RUNCIMAN. New York, Cambridge University Press, 1972. Pp. vi, 106. \$6.50.

Mr. Runciman organizes his succinct exposition and discussion of Weber's main contributions to questions about the philosophical peculiarities, if any, which the social sciences do not share with the natural sciences, around three main criticisms to which he thinks Weber's work in this field is open. His case is that when the force of these criticisms is acknowledged, it is still clear that the philosophical side of Weber's work can stand as one of the most impressive systematic elaborations and clarifications of a number of currently alive issues. In this last claim he is surely right and his study will be a useful introduction to this work, succeeding as it does in compressing a lot of material into a short space in a clear and lively style and in providing

¹ I would urge that he *should* deny this; but no need to grind that ax here.